

Montana Injured Worker Opioid Utilization

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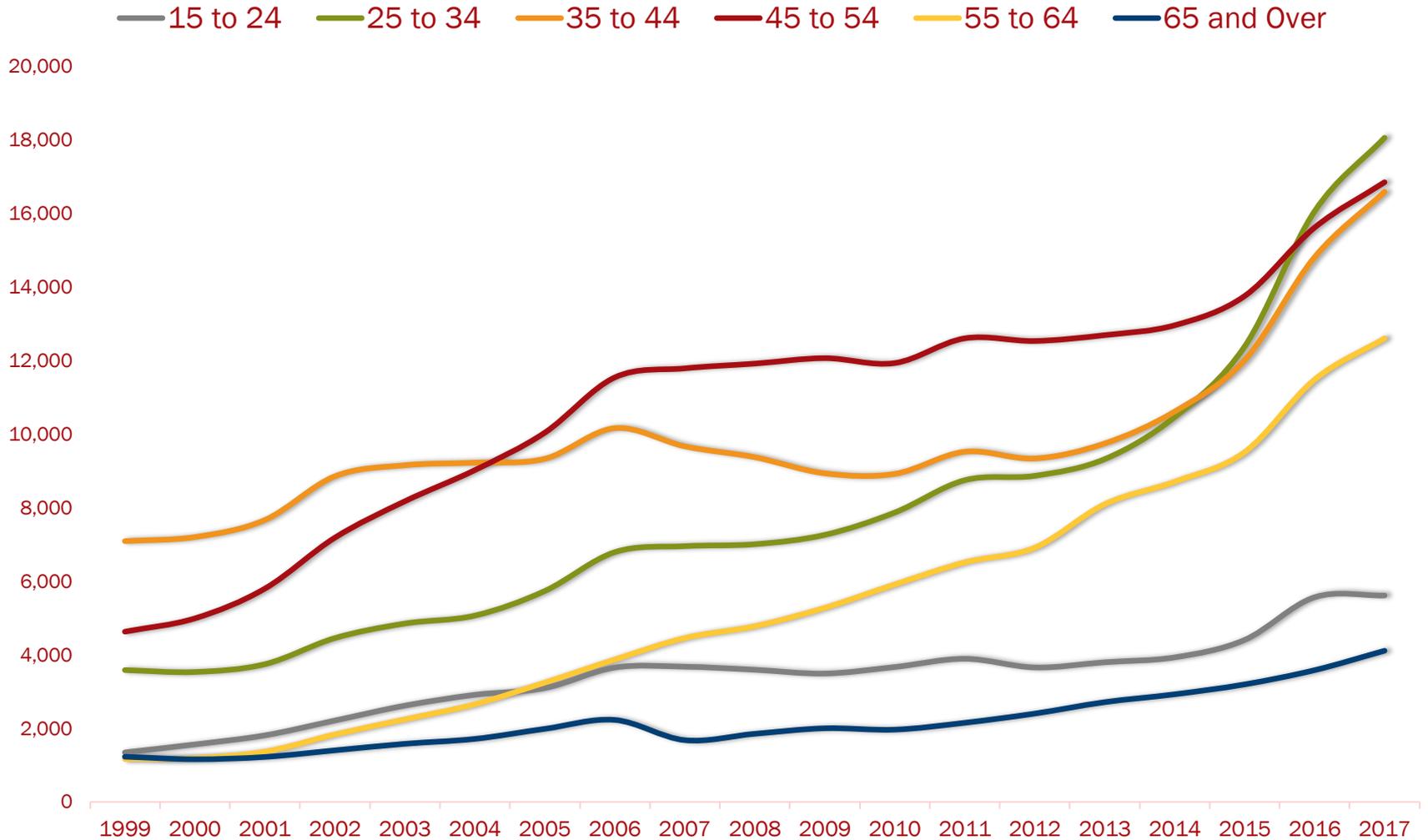


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Disclaimer

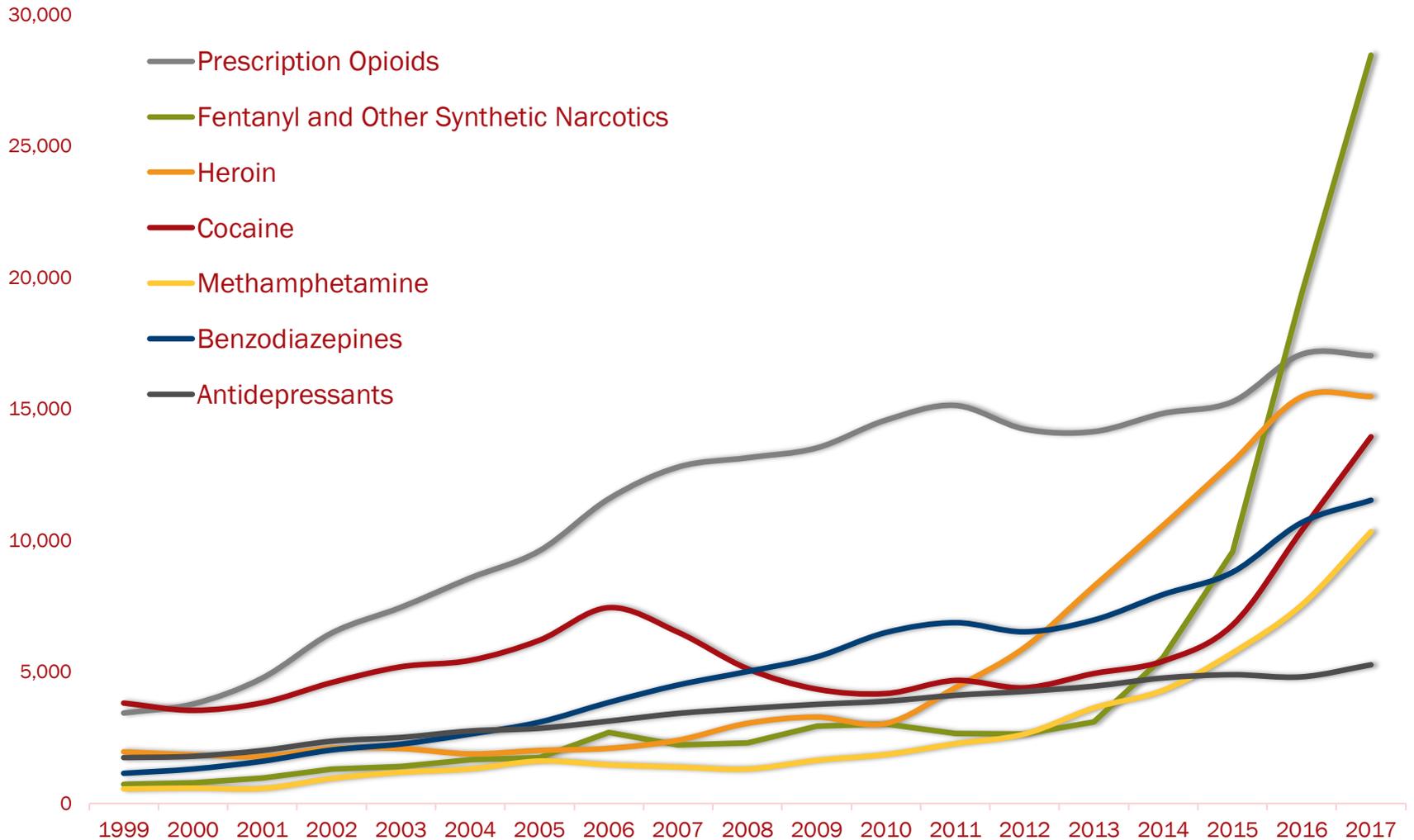
1. I am **NOT** a medical professional, and I have **NO** medical or pharmaceutical training.
2. I have no conflicts of interest.

Total U.S. Drug Overdose Deaths by Age



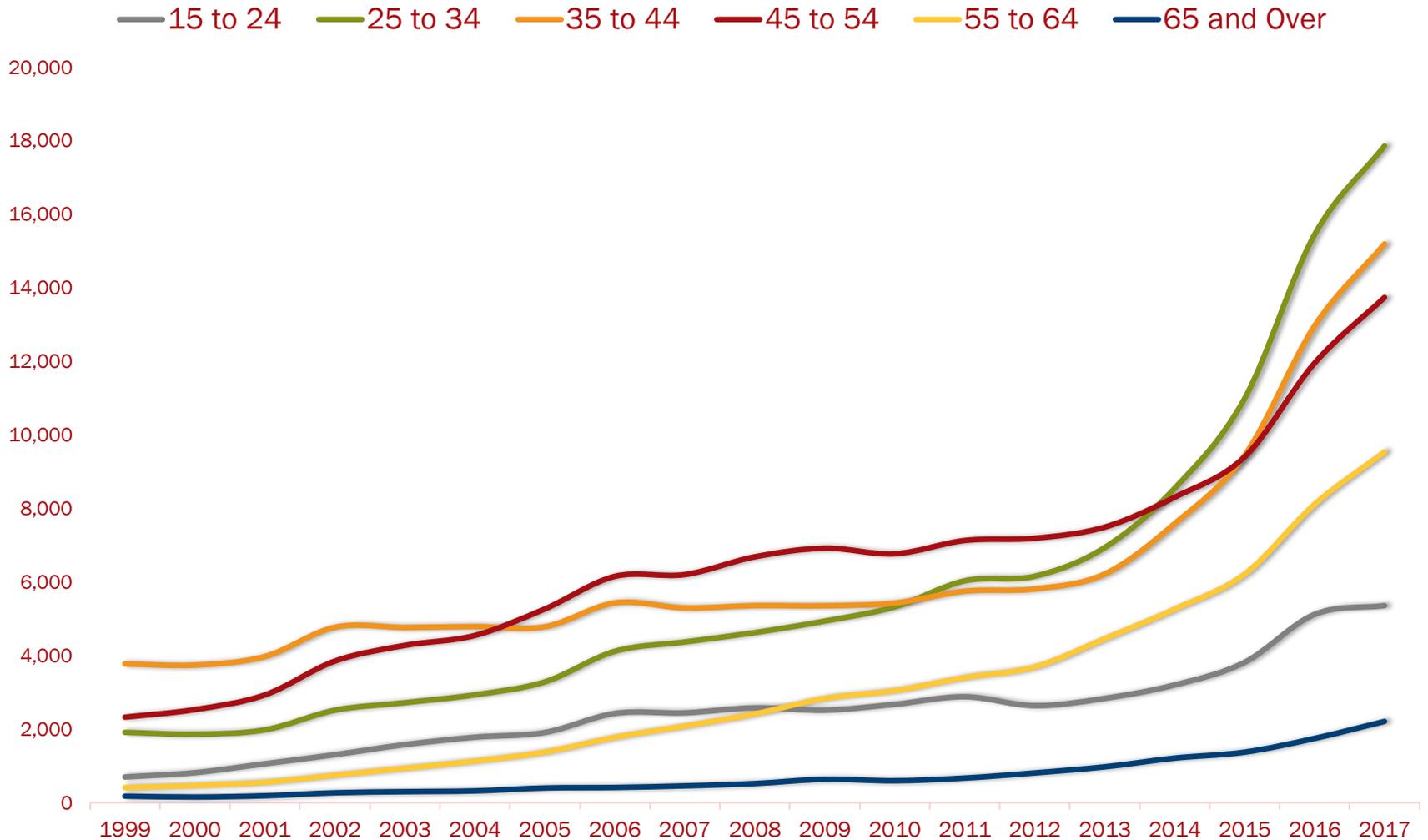
Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2017 on CDC WONDER Online Database

U.S. Drug Overdose Deaths by Type of Drug



Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2017 on CDC WONDER Online Database

Total U.S. Opioid Overdose Deaths by Age



Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2017 on CDC WONDER Online Database

Opioid Utilization and Work Comp

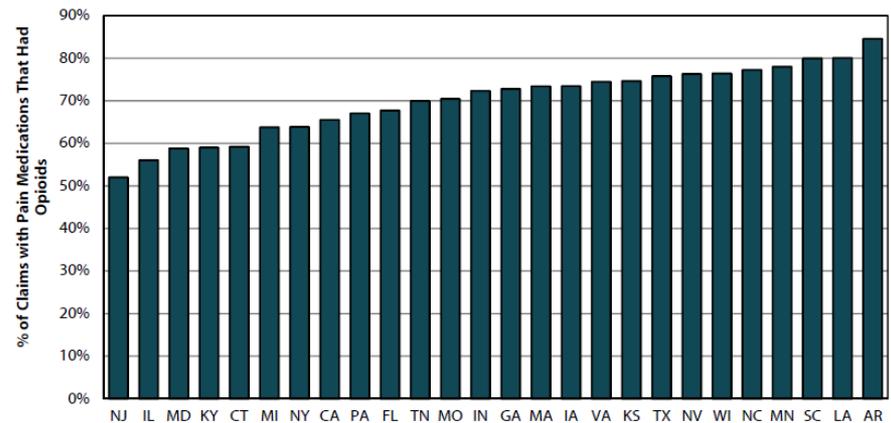
Interstate Variation in Use of Opioids (WCRI, 2017)

- The percentage of nonsurgical workers' comp claims with pain medications ranged from 52% to 85% across the 26 study states.
 - Between 24% and 58% of workers with pain medications had 2 or more opioid prescriptions
- The average morphine milligram equivalent amount of opioids prescribed per workers' compensation claim ranged from 880 MEA to 3,539 MEA.
 - Opioid amount per opioid claim decreased in 24 out of the 26 study states over a three year period

Longer-Term Dispensing of Opioids (WCRI, 2017)

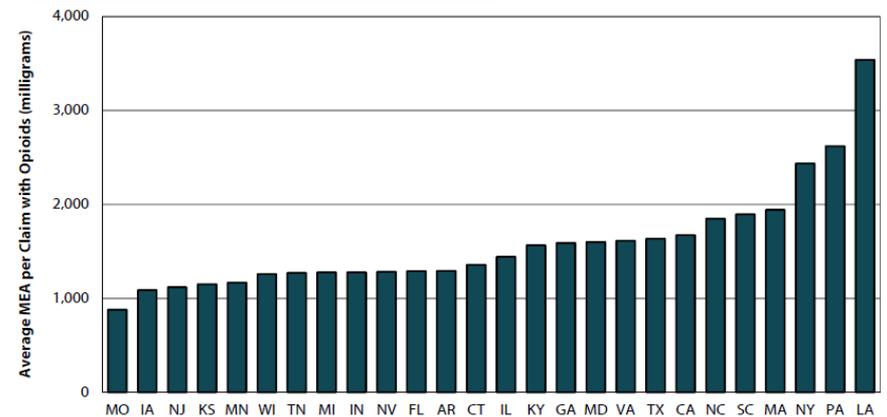
- Between 4% and 18% of workers received opioids on a longer term basis.

Percentage of Claims with Pain Medications That Had Opioids, 2013/2015



Notes: The underlying data include nonsurgical claims with more than seven days of lost time that had prescriptions filled by injured workers over the defined period and paid for by a workers' compensation payor. 2013/2015 refers to claims with injuries occurring from October 1, 2012, through September 30, 2013, and prescriptions filled through March 31, 2015.

Average MEA per Claim with Opioids,^a 2013/2015



Notes: The underlying data include nonsurgical claims with more than seven days of lost time that had prescriptions filled by injured workers over the defined period and paid for by a workers' compensation payor. 2013/2015 refers to claims with injuries occurring from October 1, 2012, through September 30, 2013, and prescriptions filled through March 31, 2015.

^a Reported are the mean values of MEA per claim with opioids after excluding a small percentage of claims that had unusually high amounts of opioids. See Chapter 2 for a description of how we identified claims with unusually high amounts of opioids.

Opioid Utilization and Lost Work Time

The Impact of Opioid Prescriptions on Duration of Temporarily Disability (WCRI, 2018)

- Workers with **longer-term opioid prescriptions had more than triple the duration of temporary disability** when compared similar workers with similar injuries who did not receive any opioids.
 - Little evidence that small number of prescriptions over a short period impact duration of temporary disability

A Substance Use Cost Calculator for US Employers With an Emphasis on Prescription Pain Medication Misuse (Goplerud, Hodge, & Benham, 2017)

- Most employees miss an average of 10.5 days per year; Workers with pain medication use disorder miss an average of 29 days per year

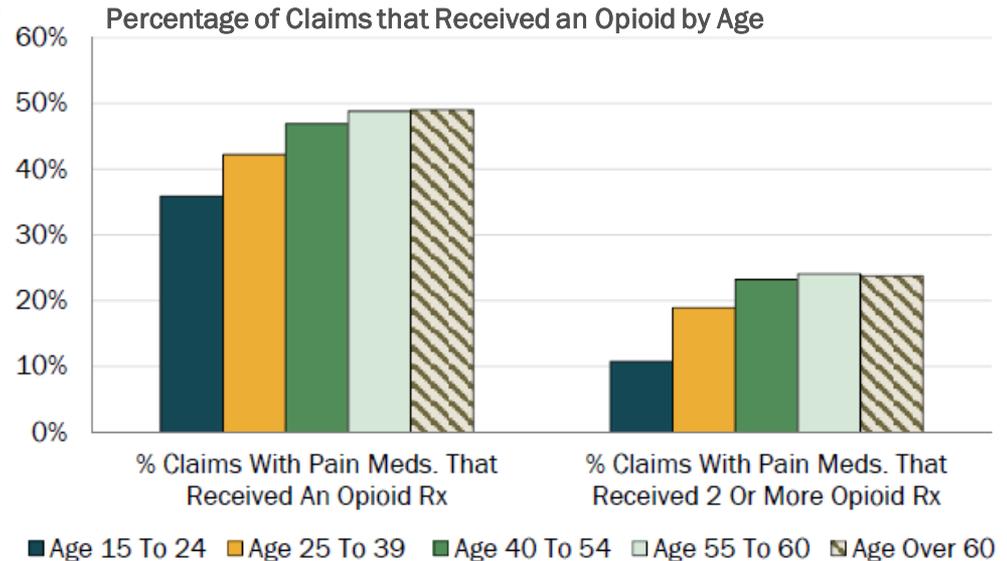
| | General Work Force | Any SUD | Alcohol Use Disorder | Illicit Drug Use Disorder | Pain Med Use Disorder | Marijuana Use Disorder | In Recovery |
|--|--------------------|-------------|----------------------|---------------------------|-----------------------|------------------------|-------------|
| Missed work days for injury, illness past year | 8.4 | 10.2 | 9.4 | 13.0 | 22.2 | 10.6 | 8.3 |
| Missed work days for other reasons past year | 2.1 | 4.7 | 4.7 | 5.4 | 6.8 | 4.8 | 1.2 |
| Total missed work days past year | 10.5 | 14.8 | 14.1 | 18.4 | 29.0 | 15.4 | 9.5 |
| Worked for more than one employer in last year (%) | 25 | 36 | 36 | 42 | 42 | 45 | 23 |

Opioid Related Risk Factors

Correlates of Opioid Dispensing (WCRI, 2018)

Higher rates of opioid prescribing for:

- Older workers
- Men
- Rural areas
- Employed in small businesses
- Employed in construction or mining industries
- Fractures, carpal tunnel, neurological spine pain injuries



Opioid-related Overdose Deaths in Massachusetts by Industry and Occupation (MA DPH, 2018)

Rate of opioid overdose death higher for:

- Construction and Farming, Fishing & Forestry industries
- Occupations with low job security
- Occupations with low paid sick leave

What does the data show for injured worker opioid utilization in Montana?



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Notes & Definitions

Notes:

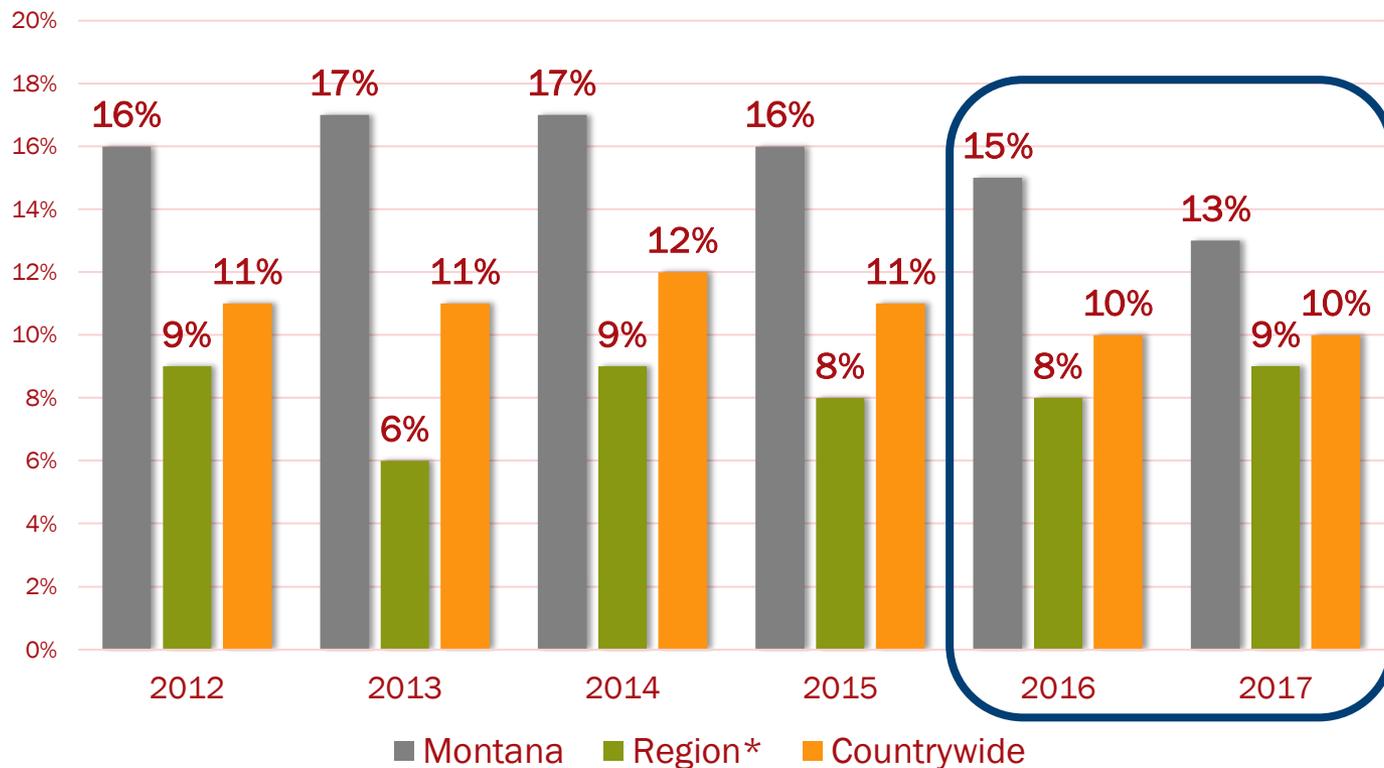
- All data provided by **NCCI** and specific to **workers' compensation**
- **Plan 1 (Self-Insured)** participants do not report to NCCI and are therefore **not included**
- **Regional** states include: AK, AZ, CO, HI, ID, NM, NV, OR, and UT (unless otherwise specified)
- **Countrywide (CW)** states include: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NJ, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WI, and WV (unless otherwise specified)

Definitions:

- **Service Year (SY):** one service year reflects **all medical payments** made during that calendar year that were received by NCCI
- **Drug Claim:** a claim with ***at least one script***
- **Opioid Claim:** a claim with ***at least one opioid script***

Prescription Drug Share of Medical Payments (SY12- SY17)

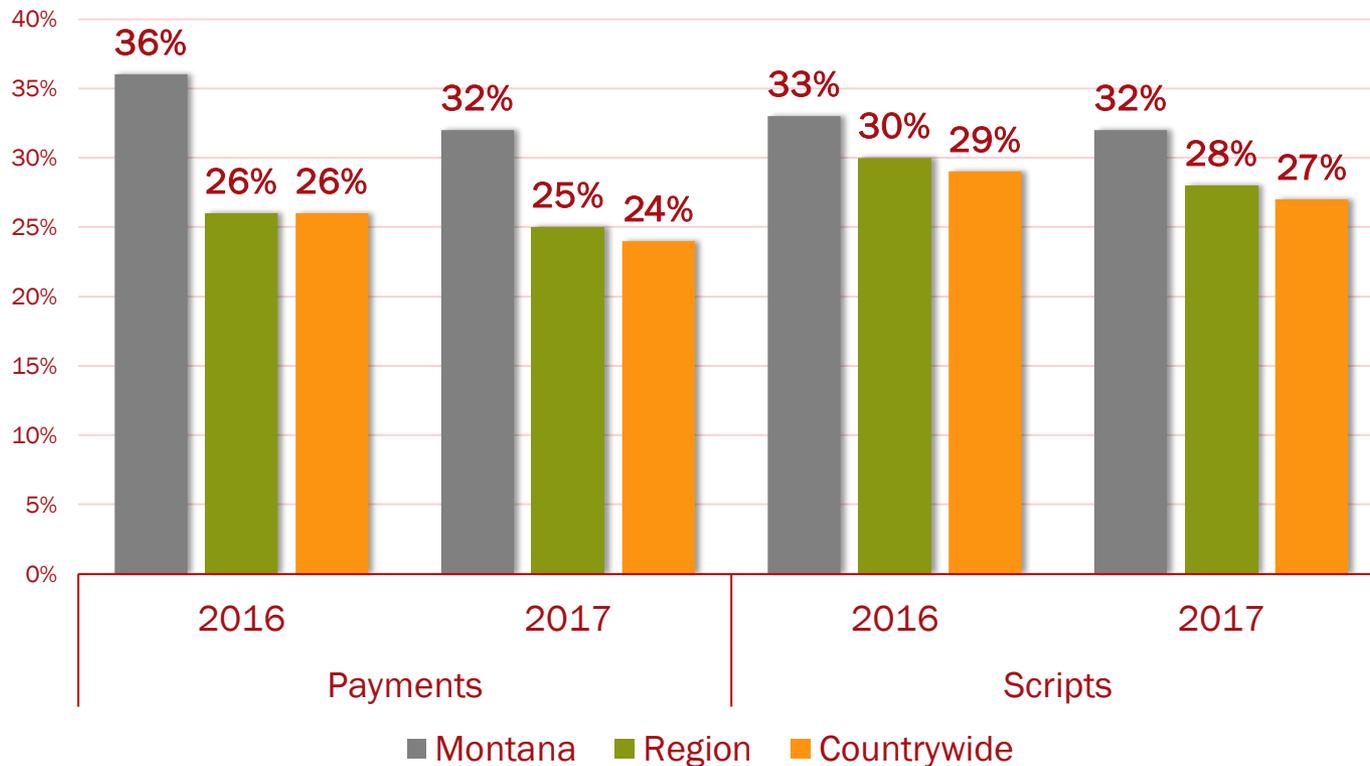
Prescription drugs consistently consume a **larger portion of the total medical payments** in Montana compared to the region and countrywide.



*Region defined differently in 2012-2015 vs. 2016 vs. 2017

Opioid Share of Drug Payments and Scripts (SY16 vs. SY17)

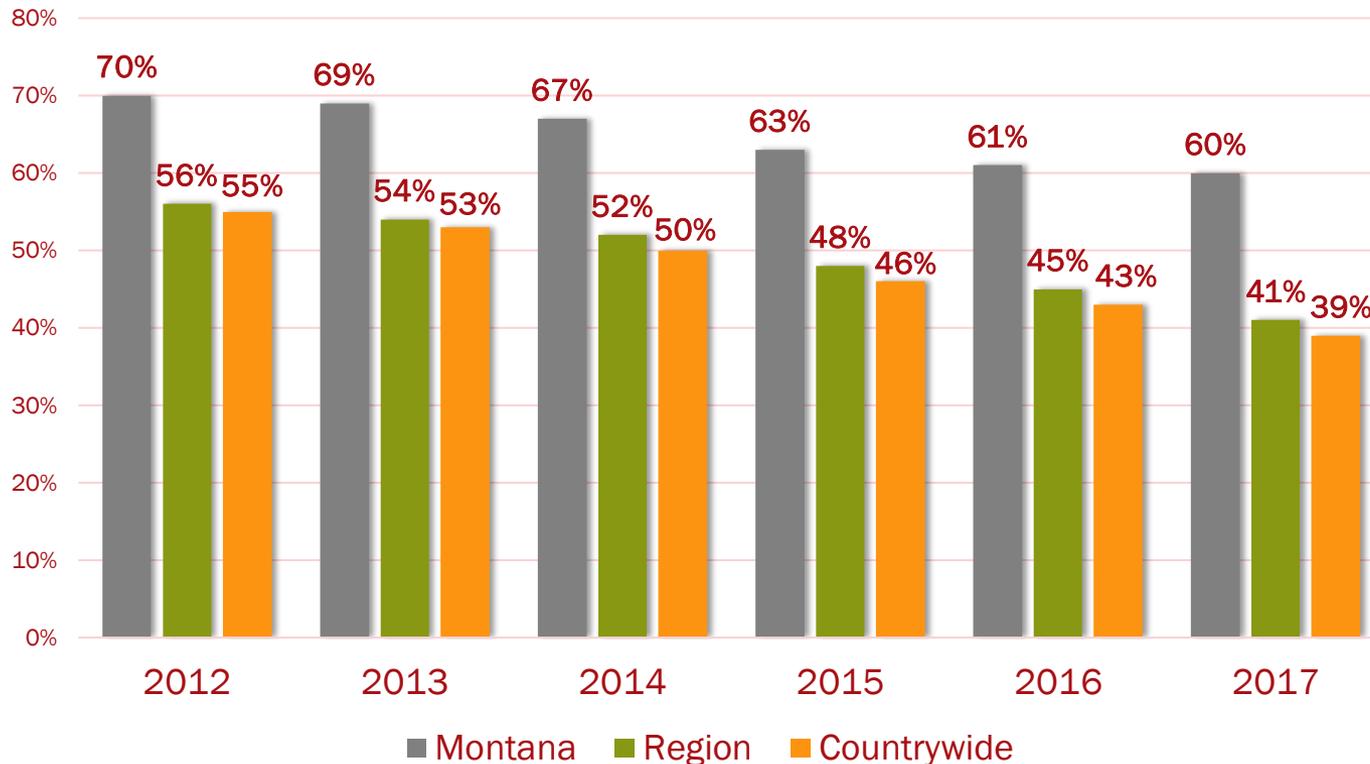
Opioids consume a **larger portion of the total drug payments** and a **larger portion of total scripts** in Montana compared to the region and countrywide.



*Region defined differently in 2016 vs. 2017

Share of Drug Claims with at Least One Opioid Script (SY12–SY17)

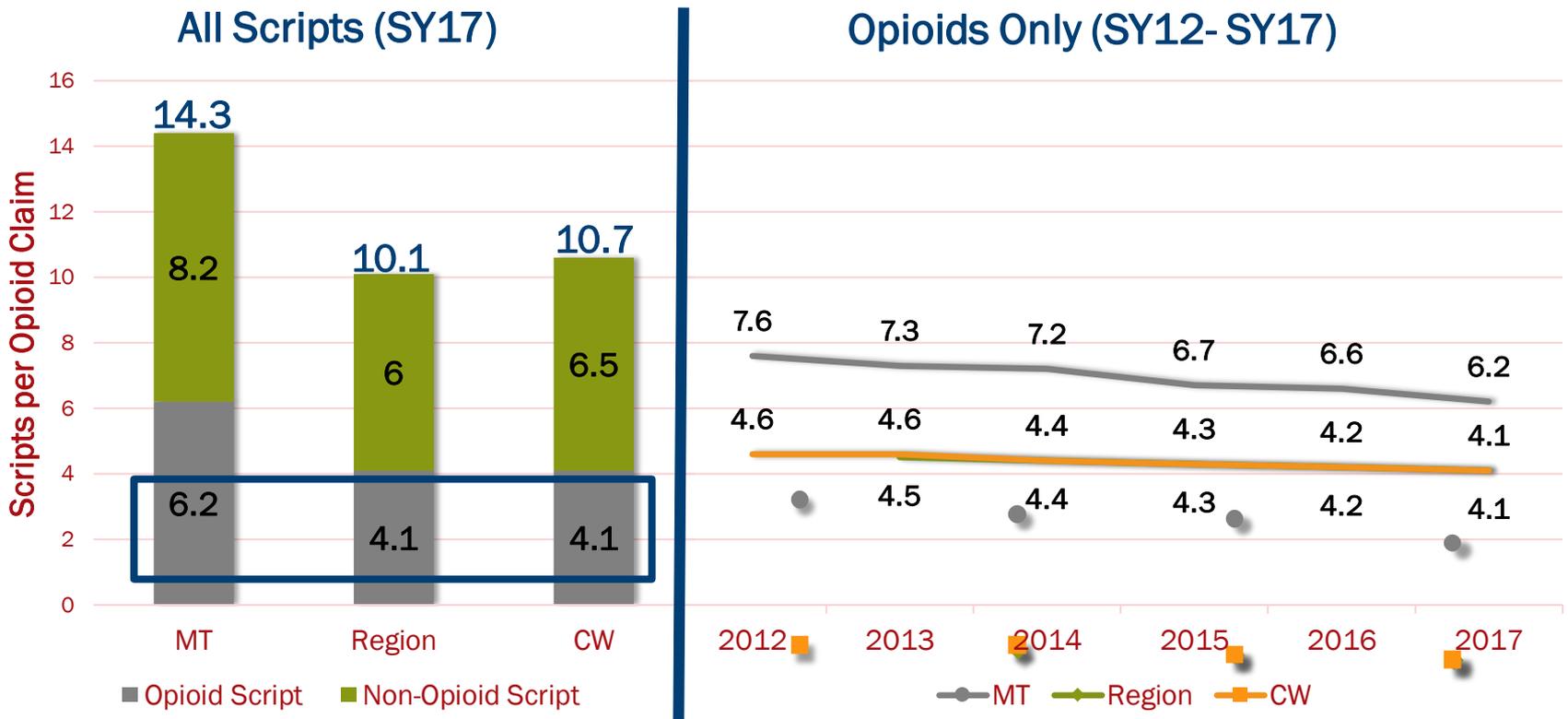
In 2017, **60%** of claims that received at least one script, of any kind, received an **opioid script**, compared to **41%** in the region and **39%** countrywide. Despite decreases since 2012, Montana consistently has a larger share of opioid claims compared to the region and countrywide.



*Region defined differently in 2012 vs. 2013-2017

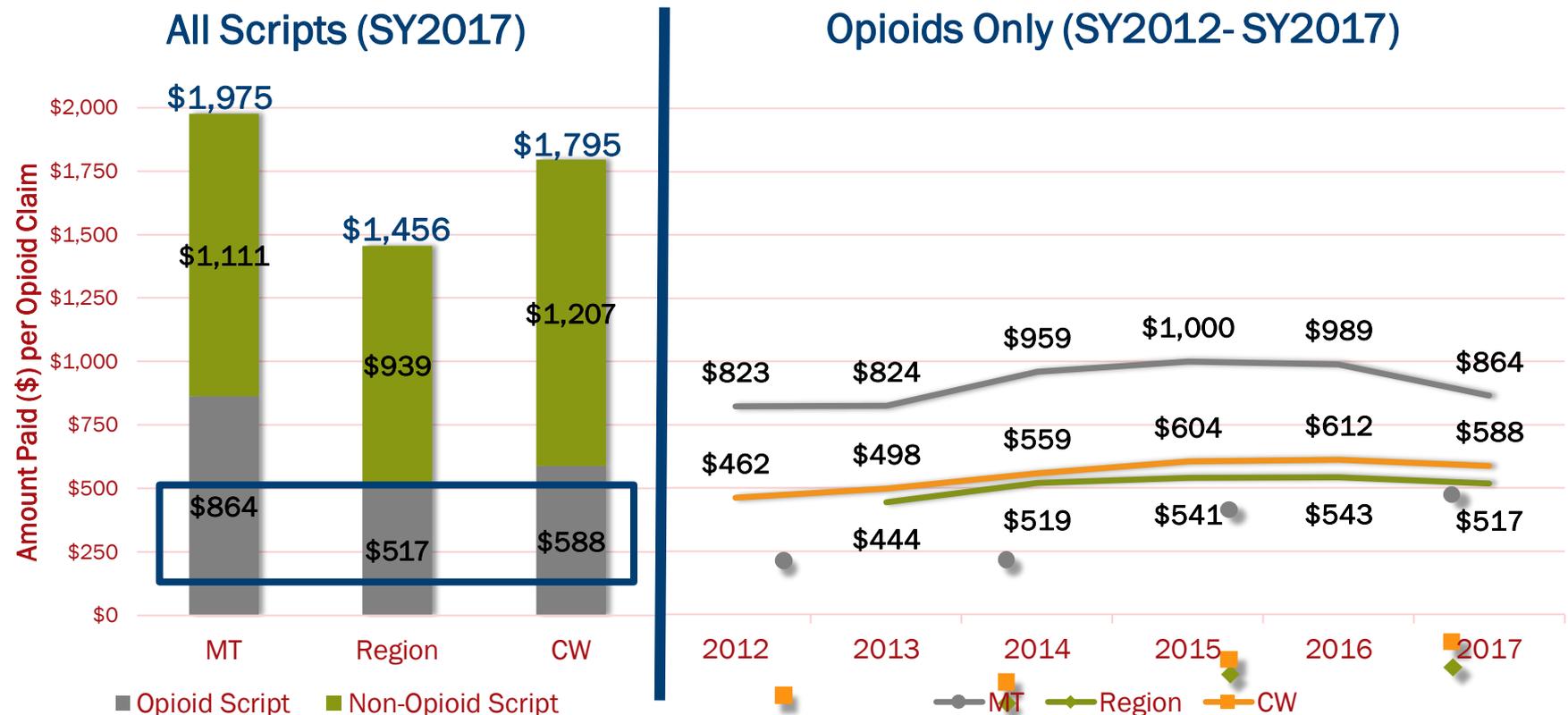
Average Number of Scripts per Opioid Claim

In 2017, injured workers in Montana that received at least one opioid script utilized on average **14.3 prescriptions**, including **8.2 non-opioid scripts** and **6.2 opioid scripts**. Comparatively, opioid claims in both the region and countrywide consumed **fewer opioid and non-opioid** scripts on average.



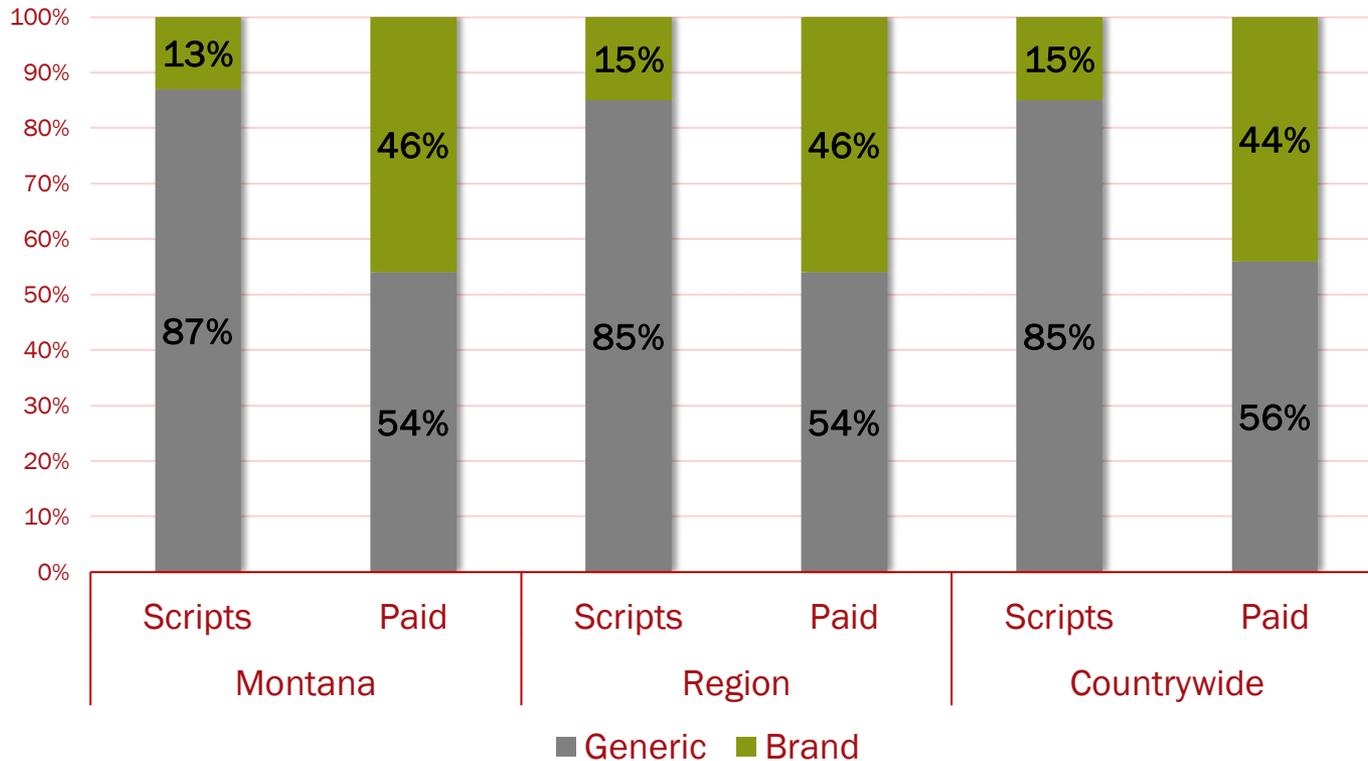
Average Amount Paid for Scripts per Opioid Claim

In 2017, the average total amount paid for prescription drugs per opioid claim in Montana was **\$1,975**, including **\$1,111 for non-opioid scripts** and **\$864 for opioid scripts**. Comparatively, the average total amount paid per opioid claim was less for both non-opioid scripts and opioid scripts in the region and less for opioid scripts countrywide.



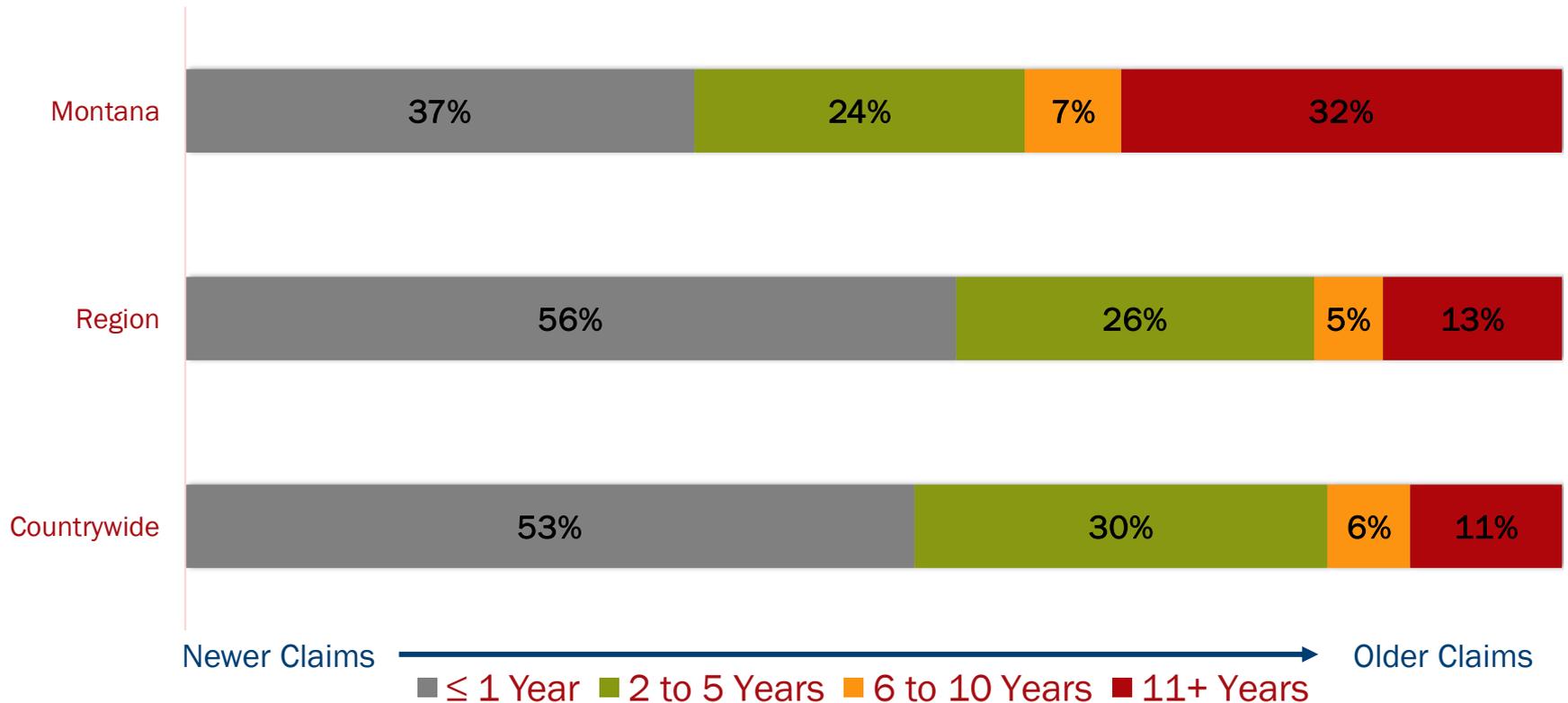
Distribution of Drug Scripts and Amount Paid by Brand Name and Generic (SY17)

The distribution of drugs by brand versus generic is **similar** across Montana, the region, and countrywide. Montana requirements for the prescribing of generics over brand names is written out in **§39.71.727** and **ARM 24.29.1529**.



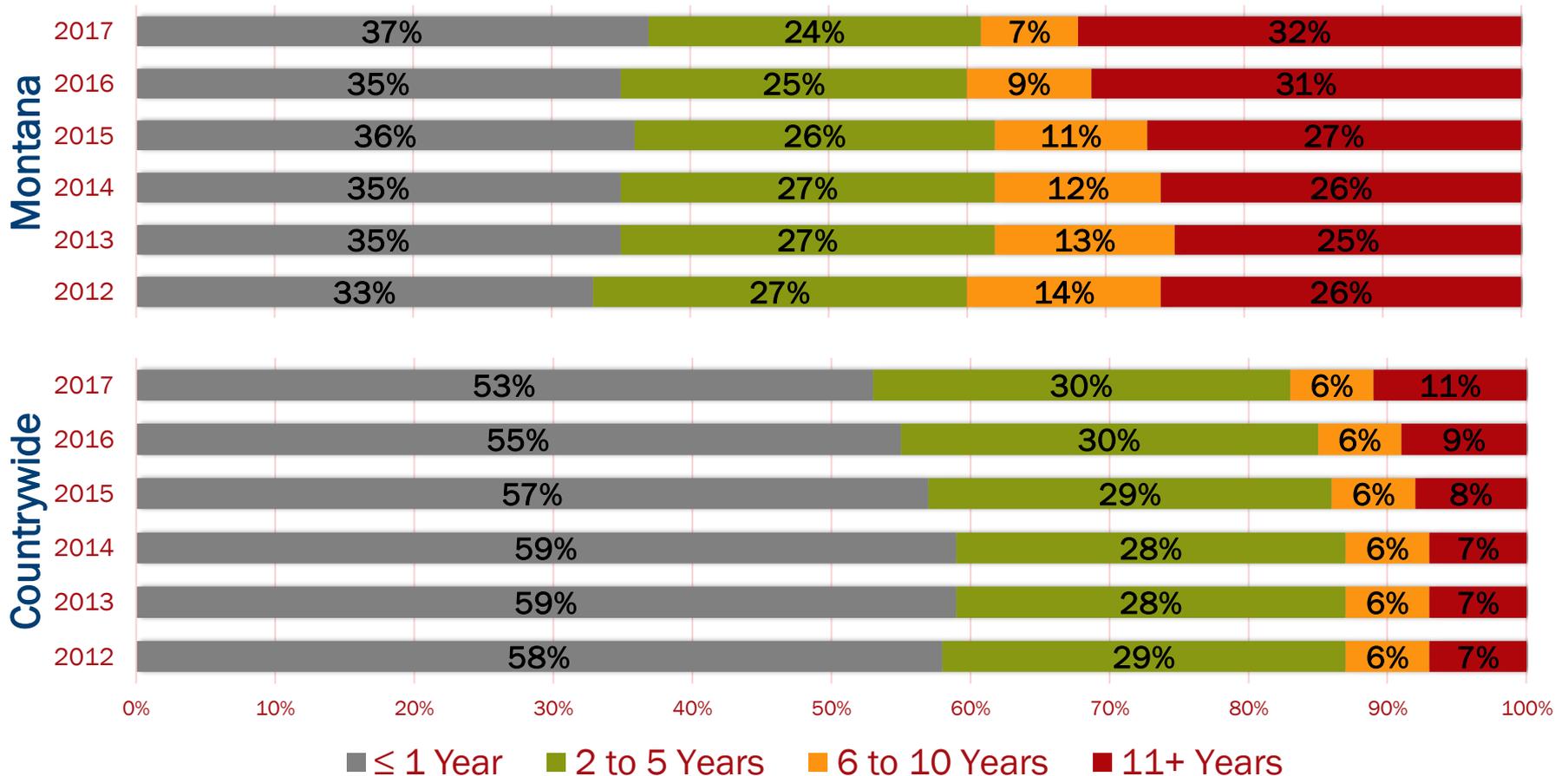
Opioid Claim Distribution by Claim Maturity (SY17)

In 2017, for all opioid claims in Montana, **39% were claims that were 6 years mature or older**, compared to **18% regionally** and **17% countrywide**.

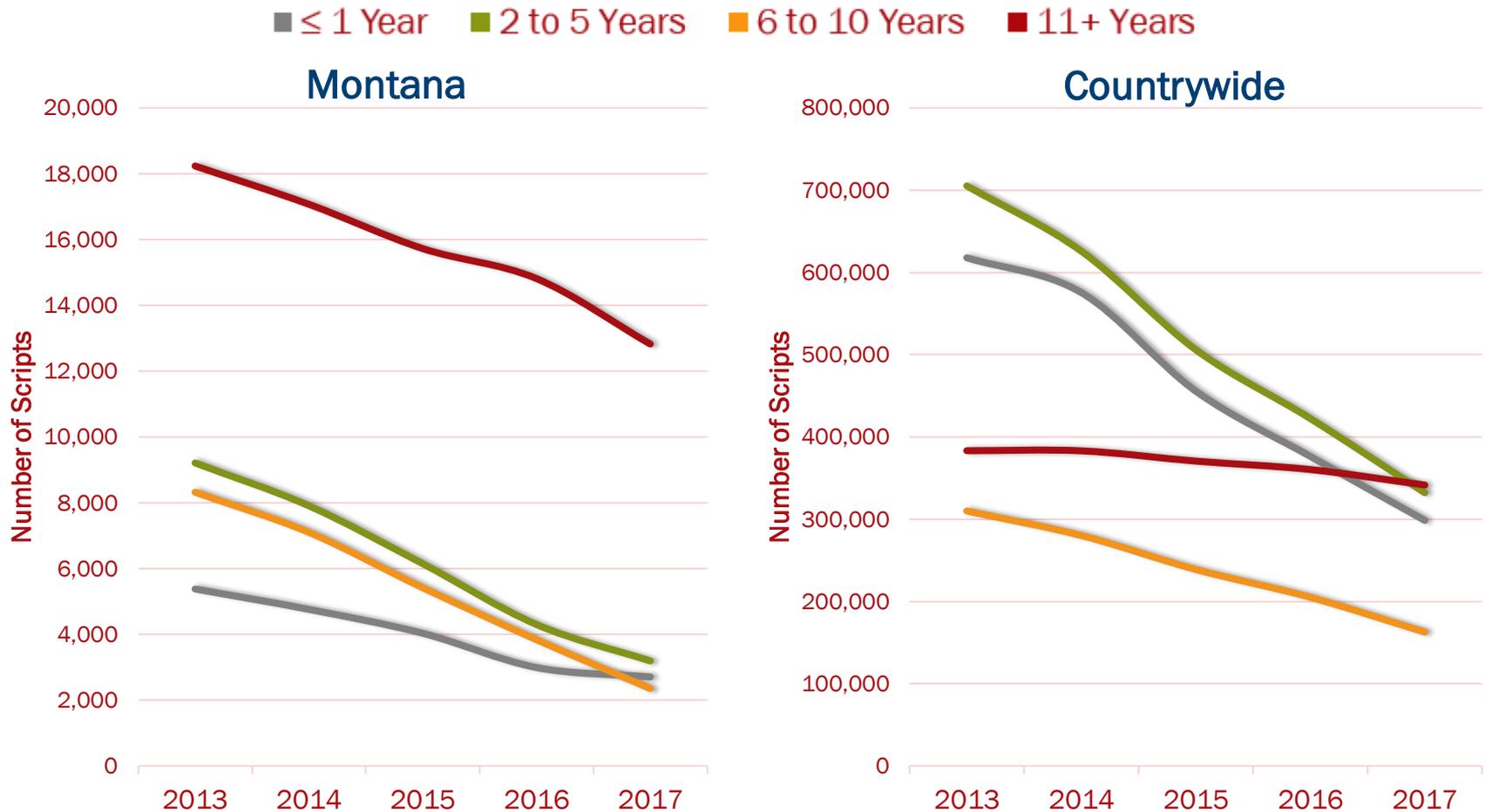


Opioid Claim Distribution by Opioid Claim Maturity (SY12–SY17) – Montana vs. Countrywide

Each service year, a **larger portion of older claims receive an opioid script** in Montana compared to countrywide.



Total Number of Opioid Scripts by Opioid Claim Maturity (SY12–SY17) – Montana vs. Countrywide



Morphine Milligram Equivalents (MME)

The CDC provides a way to convert daily or hourly doses of **opioid** to an equivalent daily dose of **morphine**.

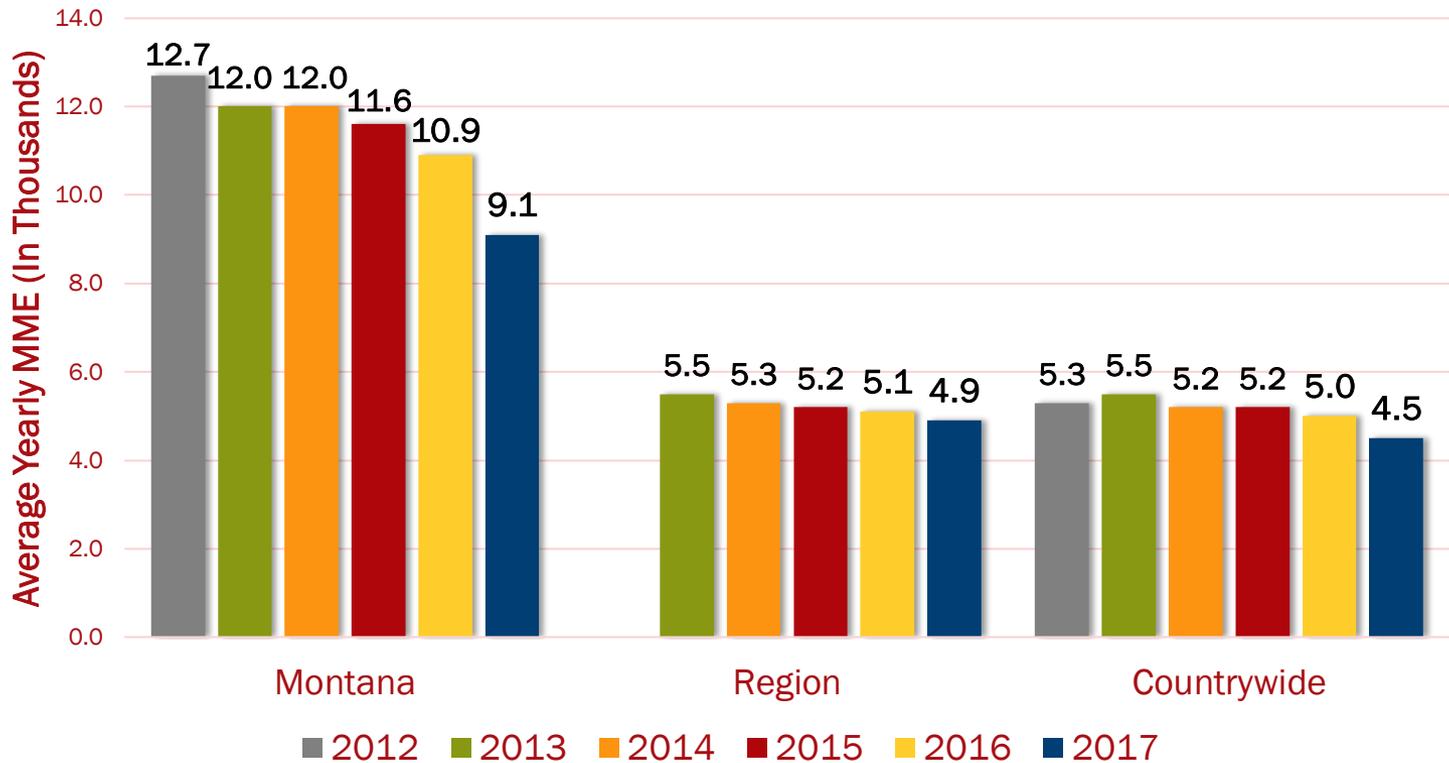
| Opioid | Conversion Factor | Example |
|-------------|-------------------------|---------------------------|
| Tramadol | 1mg Tramadol = .10 MME | 20mg Tramadol = 2 MME |
| Codeine | 1mg Codeine = .15 MME | 20mg Codeine = 3 MME |
| Vicodin | 1mg Vicodin = 1.0 MME | 20mg Vocidin® = 20 MME |
| Morphine | 1mg Morphine = 1.0 MME | 20mg Morphine = 20 MME |
| Oxycodone | 1mg Oxycodone = 1.5 MME | 20mg Oxycodone = 30 MME |
| Oxymorphone | 1mg Oxymorphone = 3 MME | 20mg Oxymorphone = 60 MME |



Average Yearly MME per Opioid Claim (SY12–SY17)

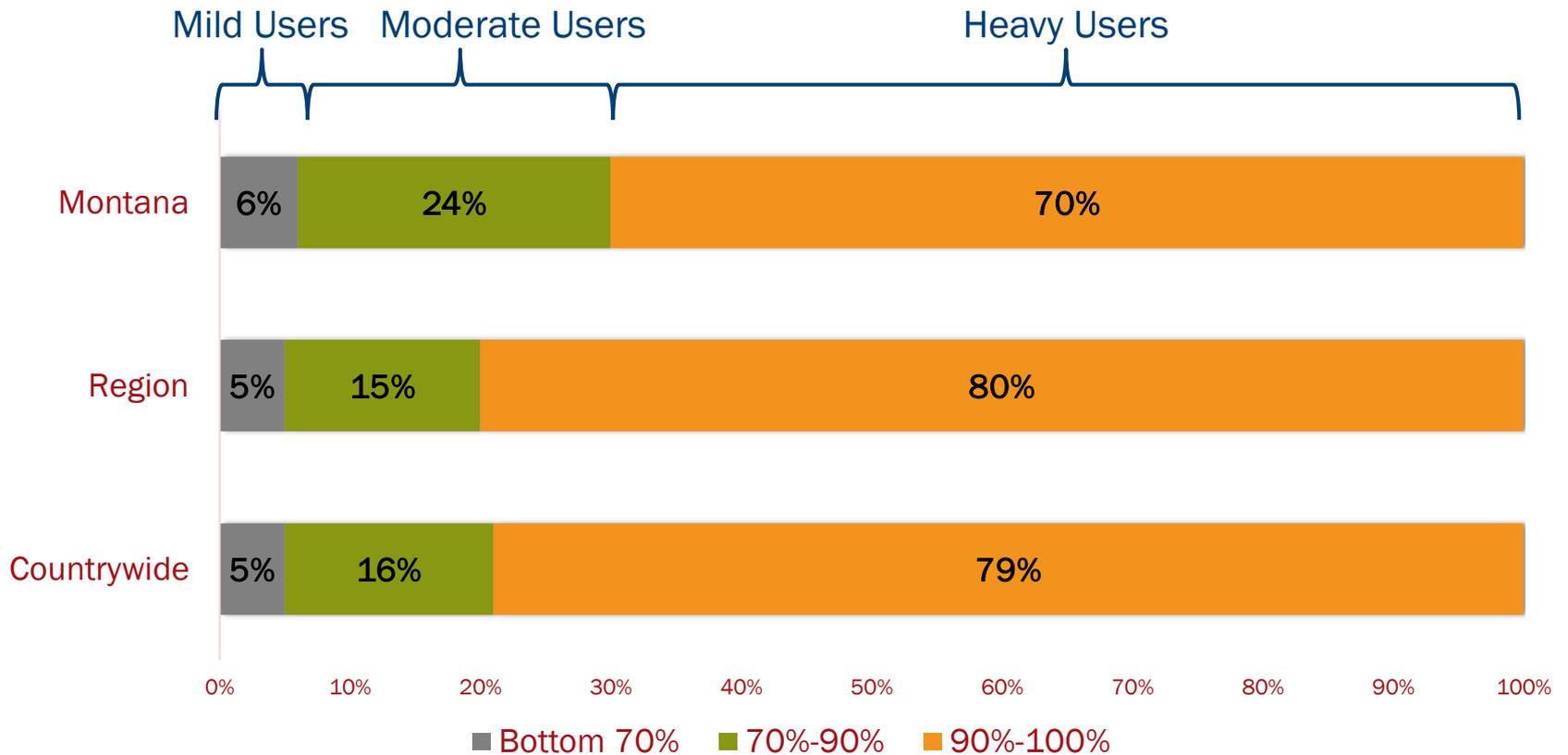
In 2017, the average yearly MME per opioid claim in Montana was **2x higher than the region and countrywide averages**.

From 2012 to 2017, the average yearly MME per opioid claim in Montana **decreased by 24%**.

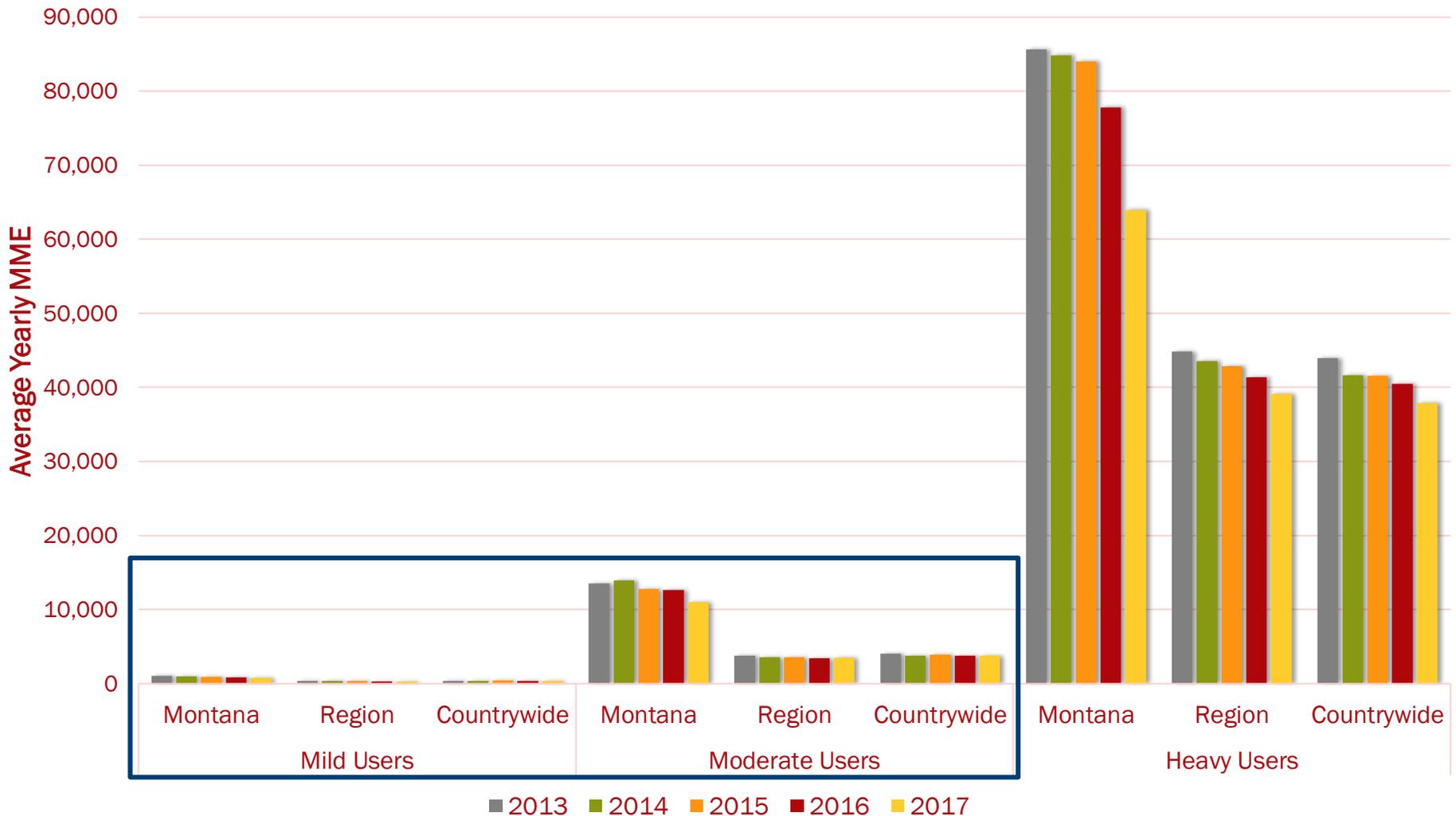


Distribution of MME by Consumption (SY17)

In Montana, regionally, and countrywide, the **top 10% of claims consume the majority of the total MME dispensed.**



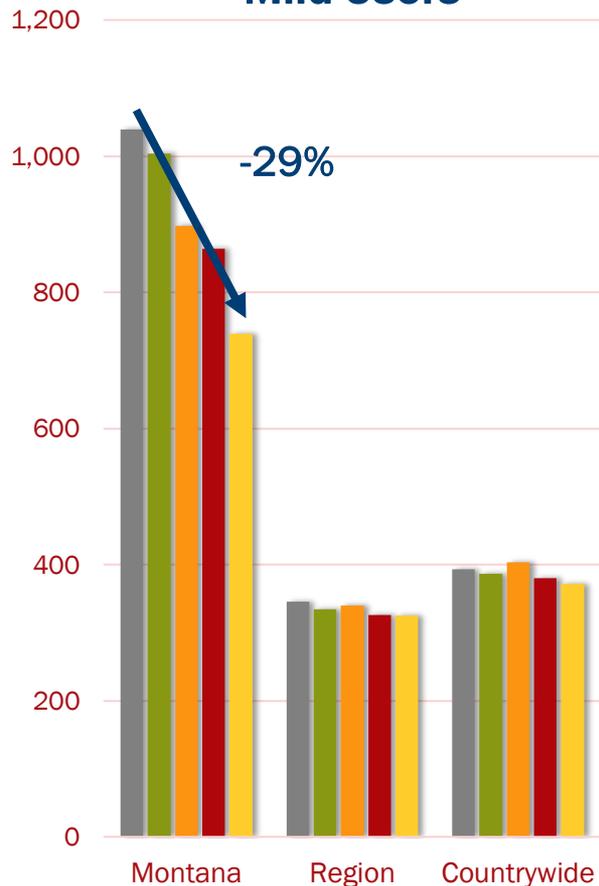
Average Yearly MME per Opioid Claim (SY13–SY17): Mild Users vs. Moderate Users vs. Heavy Users



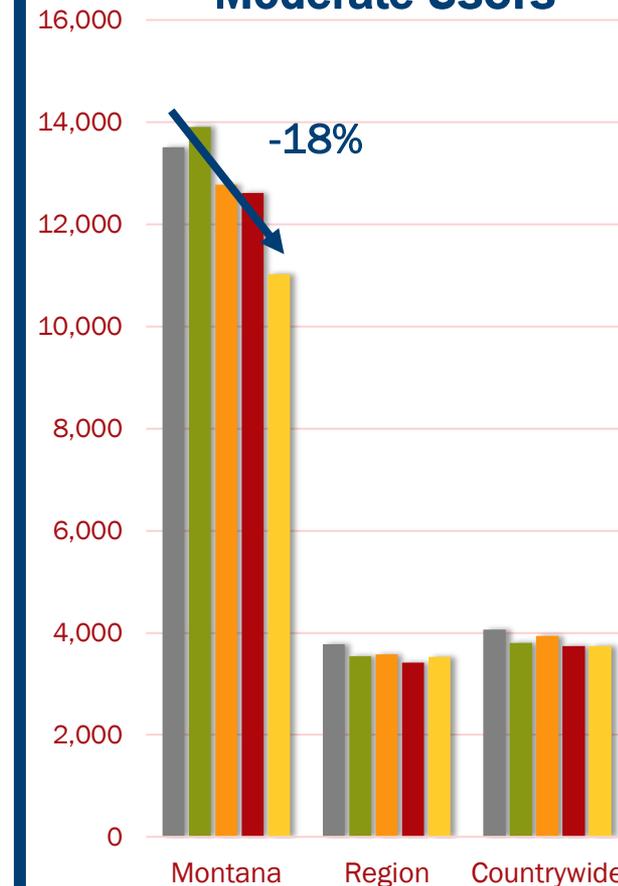
Average Yearly MME per Opioid Claim (SY13–SY17): Mild Users vs. Moderate Users vs. Heavy Users

■ 2013 ■ 2014 ■ 2015 ■ 2016 ■ 2017

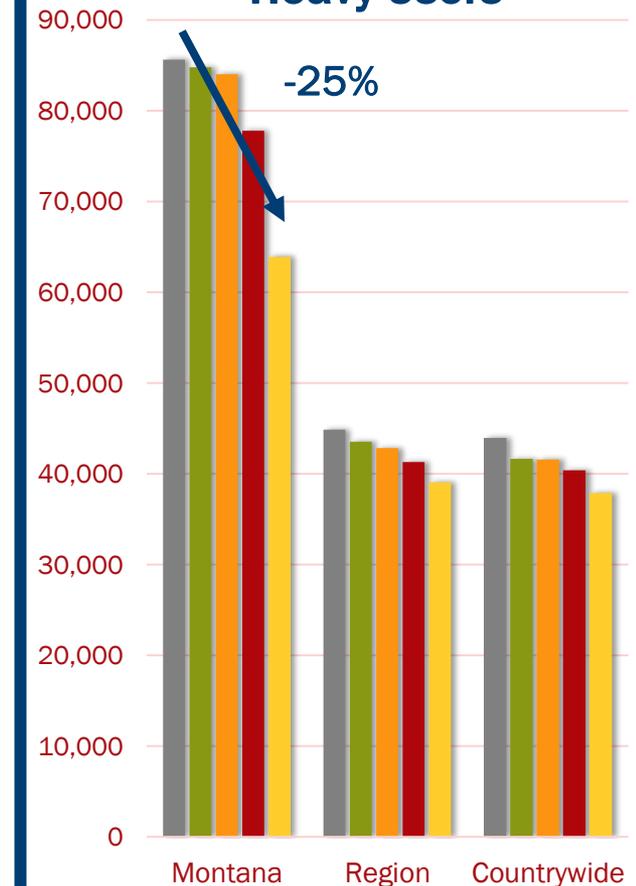
Mild Users



Moderate Users



Heavy Users



Possible Explanations...

- **Older** claims
 - Opioids more often prescribed for chronic, rather than acute, pain?
- **Outliers**
 - Small percentage of opioid claims are receiving the most MME
- More diagnosis for **pain** in Montana?
 - In SY16, 5 of the Top 10 Diagnosis by Amount Paid for Hospital Outpatient Services in MT were pain related.
 - “Not typical” across other states (NCCI)
- More **surgeries** in Montana?
 - In SY17, the average number of surgical hospital outpatient visits per 1,000 active claims in MT was 120, compared to 78 in the region and 88 countrywide.
 - In SY17, the average number of ambulatory surgery center visits per 1,000 active claims in MT was 100, compared to 62 in the region and 67 countrywide.
- Average medical claim **severity higher** in Montana (\$43k) compared to CO (\$31k), ID (\$31k), NE (\$38k), NV (\$29k), OR (\$17k), SD (\$37k), and UT (\$37k)
- Fewer treatment options available in **rural** Montana
- MT less proactive in implementing ways to address opioids?

Efforts to Address Opioid Epidemic

Prescription Nation 2018 (National Safety Council):

1. Mandating prescriber education on effective pain management and identifying substance use disorders
2. Implementing opioid prescribing guidelines
3. Mandating PDMP checks
4. Improving data collection and sharing
5. Treating opioid overdose; expanding access to naloxone
6. Increasing availability of opioid use disorder treatment; expand use of medication assisted treatment

Montana:

- Work Comp Drug Formulary Effective for New Claims 4/1/2019 and Effective for Legacy Claims 4/1/2020
- 2019 Session Bills Related to Prescribing:
 - [HB 86](#) – Generally revise prescription drug laws; This bill would restrict prescriptions for “opioid-naïve” patients to a 7-day supply, require prescribers to register to use the prescription drug registry, and require prescribers to review the prescription drug registry before prescribing an opioid or a benzodiazepine; **Signed by Governor 3/21.**
 - [SB 61](#) – Revise Prescription Drug Registry; This bill would make the prescription drug registry registration mandatory for all persons licensed under Title 37 to prescribe or dispense prescription drugs at the time of the initial licensure or renewal of licensure. **Passed by Legislature**

Thank you!/Questions?

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MME by Consumption: Example of Calculations

| Claimant | Annual MME Consumed | Annual MME Consumed (mg) | Annual MME Consumed (%) |
|--------------|---------------------|--------------------------|-------------------------|
| A | 1 | 3 | 1% |
| B | 2 | | |
| C | 3 | 7 | 3% |
| D | 4 | | |
| E | 5 | 11 | 5% |
| F | 6 | | |
| G | 7 | 15 | 7% |
| H | 8 | | |
| I | 9 | 19 | 9% |
| J | 10 | | |
| K | 11 | 23 | 11% |
| L | 12 | | |
| M | 13 | 27 | 13% |
| N | 14 | | |
| O | 15 | 31 | 15% |
| P | 16 | | |
| Q | 17 | 35 | 17% |
| R | 18 | | |
| S | 19 | 39 | 19% |
| T | 20 | | |
| 20 Claimants | 210 Total MME | 210 Total MME | 100% Total MME |

Assume we have a total of 20 claimants receiving opioids in one year.

Claimants are sorted in order from least to greatest annual MME consumption.

Claimants are split into 10 even groups and the total annual MME consumption is added together for each group.

Each groups annual MME is converted into a percentage of the total annual MME consumed.

In this example, the top 10% of claimants/"Heavy Users" (claimants S and T) consume 19% of the total annual MME.